

EMB (Eosin Methylene Blue) Levine Agar



Medium used for the identification and determination of Gram-negative enteric bacteria from clinical specimens.

*Equally use with KFCC (MB-E2165C).

• CONTENTS (Liter)

Pancreatic Digest of Gelatin	10.0 g
Dipotassium Phosphate	2.0 g
Lactose	10.0 g
Eosin	0.4 g
Methylene Blue	0.065 g
Agar	15.0 g
Final pH = 7.1 ± 0.2 at 25°C	

• PROCEDURE

Suspend 37.47 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolve. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

• INTERPRETATION

EMB (Eosin Methylene Blue) Levine Agar is a medium used for the identification and determination of Gram-negative enteric bacteria from clinical specimens. Pancreatic digest of gelatin provides carbon, nitrogen, vitamins and minerals for microbial growth. Dipotassium phosphate is a buffering agent. Lactose is the fermentable carbohydrate. Eosin and methylene blue act as differential indicators. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 30 - 35°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: pinkish-purple

Prepared medium

Appearance : slightly opalescent

Color: reddish-purple with a greenish cast

Incubation conditions: 30 - 35°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	blue black colonies with dark center and metallic sheen
<i>Salmonella typhimurium</i>	14028	50-100	good	colorless to amber colonies
<i>Enterococcus faecalis</i>	29212	≥10 ³	partially inhibited	colorless colonies

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Levine, M.M., (1918). Differentiation of *E. coli* and *B. aerogenes* on a simplified Eosin-Methylene Blue Agar. J. Infect. Dis. 23:43.
2. Holt-Harris, J.E., and O. Teague. (1916). A new culture medium for isolation of *Bacillus typhosa* from stools. J. Infect. Dis. 18:596-600.
3. Refer to the KFCC.

• PACKAGE

Cat. No : MB-E1019 EMB (Eosin Methylene Blue) Levine Agar	500 G
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